

Physics 515 - Data Analysis Techniques

Fall 2021

Course website <https://bright.uvic.ca>

Assignments and notes will be posted and completed assignments are to be uploaded to this website.

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Lecture schedule Mondays, Thursdays 11:30-12:50 Elliott Building 161

Textbooks Online course notes are provided.

Course description An advanced course in data analysis for the physical sciences. The lectures cover probability theory, Monte Carlo methods, and statistical analysis techniques.

Grading There will be several assignments, a written exam, and a project. The final grade is determined as follows:

assignments 55%
exam 25%
project 20%

The letter grades are obtained by converting the numerical scores using the conversion table below.

F	D	C	C+	B-	B	B+	A-	A	A+
0-49	50-59	60-64	65-69	70-72	73-76	77-79	80-84	85-89	90-100

Calculator For the exam, the departmental policy will be followed: On all examinations the only acceptable calculator is the Sharp EL-510R. This calculator can be bought in the Bookstore for about \$10. DO NOT bring any other calculator to examinations.

Programming The recommended programming language for the course assignments is Python using Jupyter Notebook. Alternatively, you may use one of: C++, Java, or MATLAB. You will need to submit your code with your assignments.

Course experience Near the end of term you will be invited to complete an anonymous survey regarding your learning experience. The survey site is: <http://ces.uvic.ca>